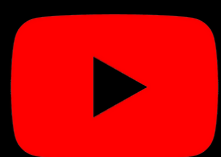
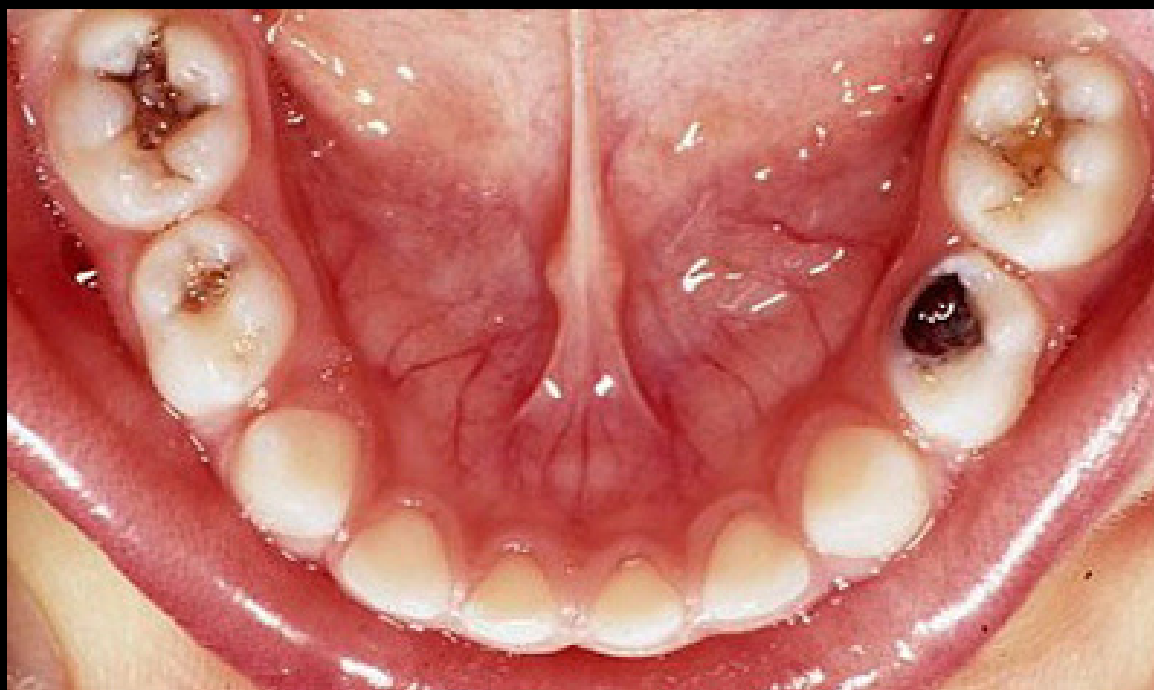




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WHEN TO EXTRACT BADLY DECAYED 6 IN CHILDREN?



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INTRODUCTION



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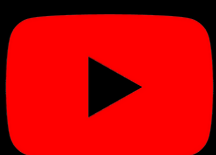
- Children continue to present with a developing dentition affected by one or more compromised **first permanent molars** (FPM) with an uncertain prognosis.
- This places a burden of disease on each child that can lead to sensitivity and pain, complex restorations or extractions and disruption to the functional occlusion.
- When correctly planned, interceptive extraction of the FPM can be followed by successful eruption of the **second permanent molar** (SPM) to provide a suitable replacement, and ideally **third molar** eruption (TPM) to complete the molar dentition.

» FOR THESE REASONS

THE ELECTIVE EXTRACTION OF COMPROMISED FPMS WITH AN UNCERTAIN LONG-TERM PROGNOSIS SHOULD ALWAYS BE CONSIDERED WITHIN THE CONTEXT OF THE PATIENT AND THEIR UNDERLYING OCCLUSION;

AND

FPM TREATMENT-PLANNING DECISIONS SHOULD IDEALLY BE MADE FOLLOWING INPUT FROM BOTH THE GENERAL DENTAL PRACTITIONER (GDP) OR PAEDIATRIC DENTIST AND A SPECIALIST ORTHODONTIST.



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WHAT ENCOURAGES EXTRACTION?

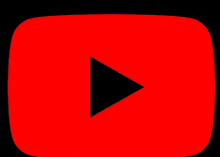


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1. BADLY DESTROYED MOLAR.
2. PERIAPICAL LESION.
3. MIH CASE.
4. NEEDED FOR RELIEVE CROWDING.

IF YOU MAKE THE BEST RESTORATION IN
THE WORLD, HOW LONG WILL IT CONTINUE
WITH **10 YEARS** BOY !?

➡ **RESPECT RESTORATIVE CYCLE**



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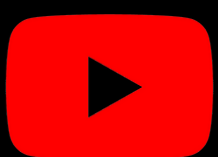
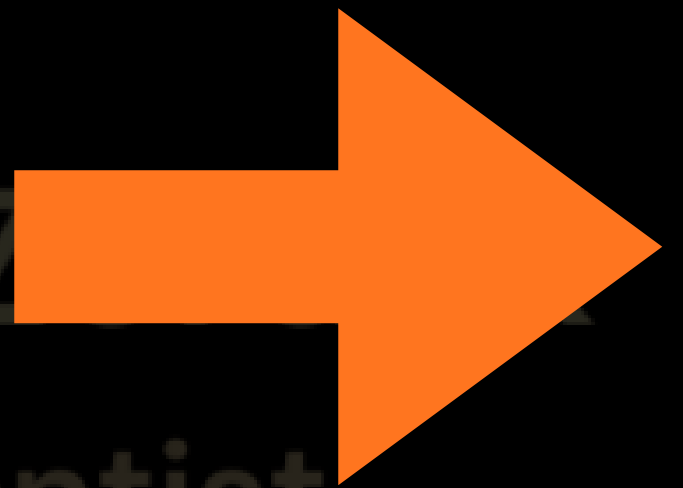


AFTER PANORAMIC INSPECTION 3 CONDITIONS MUST BE EXISTED

1. CRYPT OF 8 IS FORMED.
2. BIFURCATION OF 7 STARTED TO FORM.
3. INCLINATION OF 7 IS MESIALLY TIPPING.

AGE : 8-10 Y

EXAMPLES



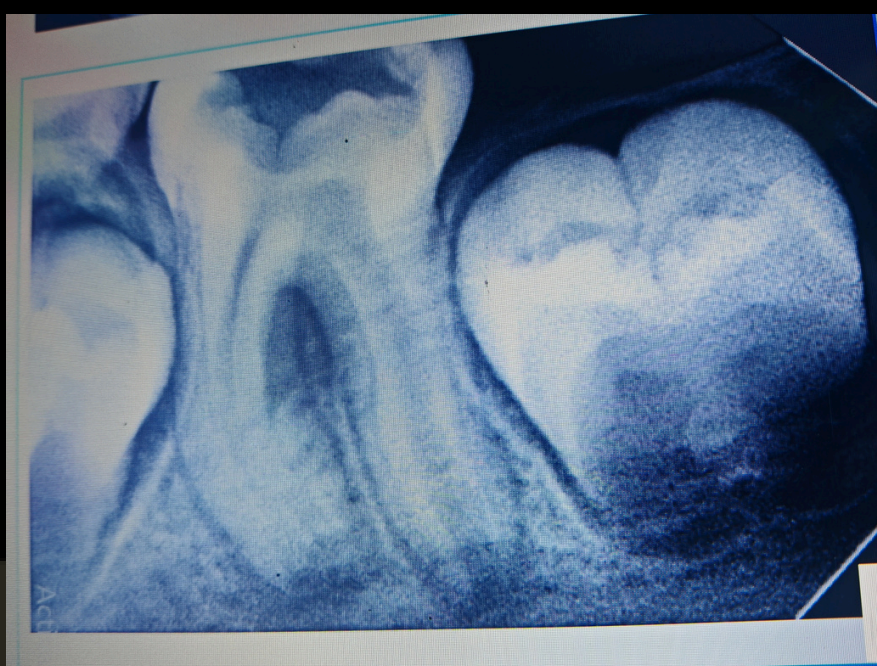
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CASE 1

BIFURCATION OF 7 NOT FORMED

NO EXTRACTION

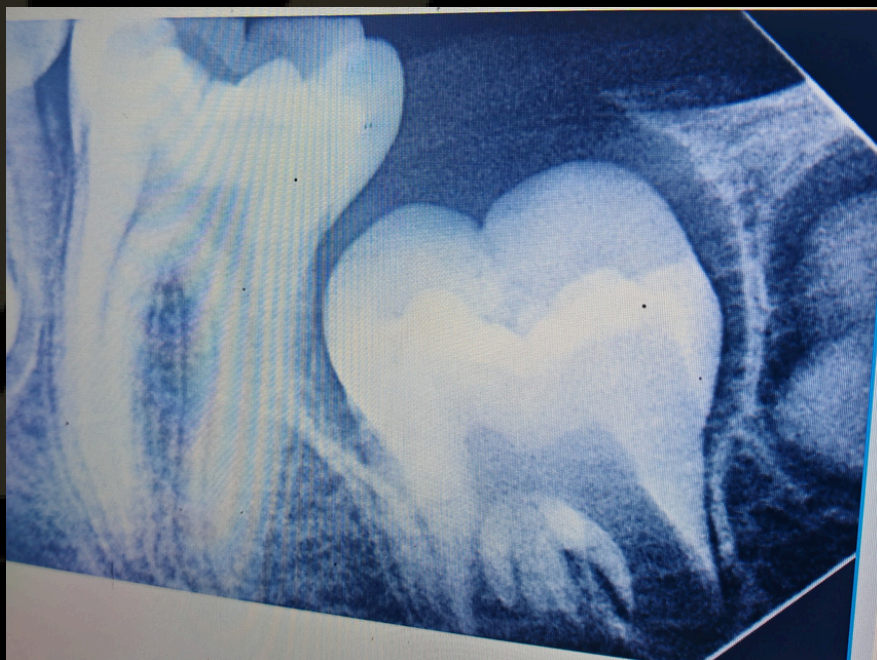


CASE 2

BIFURCATION OF 7 FORMED

CRYPT OF 8 IS FORMED

EXTRACTION



CASE 3

INCLINATION OF 7 ISN'T MESIALLY
TIPPING

NO EXTRACTION



CASE 4

INCLINATION OF 7 ISN'T MESIALLY
TIPPING & CRYPT OF 8 NOT EXISTED

NO EXTRACTION





BALANCING OR COMPENSATION OR BOTH?

» A **COMPENSATING** EXTRACTION IS THE REMOVAL OF A FPM FROM THE OPPOSING QUADRANT.

» A **BALANCING** EXTRACTION IS THE REMOVAL OF A FPM FROM THE OPPOSITE SIDE OF THE SAME DENTAL ARCH.

***FPM**: FIRST PERMANENT MOLAR

***SPM**: SECOND PERMANENT MOLAR



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COMPENSATION

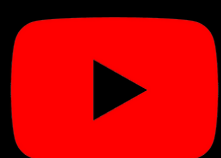


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- extraction of a sound upper FPM has been recommended when extraction of the lower FPM is required (Holm, 1970).
- This is to avoid over-eruption of an unopposed upper FPM, which can prevent desirable mesial movement of the erupting lower SPM, thus impeding space closure and potentially inducing other occlusal interferences.
- There is little evidence to verify these claims and what evidence is available is based on retrospective cohort studies, often with very small samples (Holm, 1970; Jalevik and Moller, 2007; Mejare et al., 2005).
- Current evidence would suggest that the risk of upper FPM over-eruption as a consequence of lower FPM extraction is small (Jalevik and Moller, 2007; Mejare et al., 2005)

RECOMMENDATION:-

WHEN THE ENFORCED EXTRACTION OF A LOWER FPM IS REQUIRED THE COMPENSATING EXTRACTION OF A SOUND UPPER FPM **SHOULD NOT** BE ROUTINELY CARRIED OUT **UNLESS** THERE IS A CLEAR OCCLUSAL REQUIREMENT OR LIKELIHOOD OF THE UPPER FPM BEING UNOPPOSED FOR A SIGNIFICANT PERIOD OF TIME.



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BALANCING



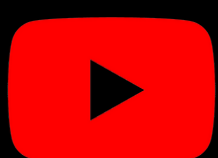
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- The balancing extraction of sound FPMs has been recommended to preserve arch symmetry (Ong and Bleakley, 2010; Williams and Gowans, 2003).
- Retrospective cohort studies have suggested that unilateral FPM extraction can be associated with the development of both skeletal and dental arch asymmetries (Caglaroglu et al., 2008; Telli and Aytan, 1989).
- Evidence from similar study designs suggests that the dental centreline in either arch is unlikely to be affected (Jalevik and Moller, 2007; Mejare et al., 2005).

RECOMMENDATION:-

ROUTINE BALANCING EXTRACTION OF A SOUND FPM TO PRESERVE A DENTAL CENTRELINE **IS NOT RECOMMENDED** UNLESS PART OF A COMPREHENSIVE ORTHODONTIC TREATMENT PLAN.

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ORTHO P.O.V



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CLASS I

► MINIMUM CROWDING:

- EXTRACT AT THE OPTIMAL TIME.
- **NO BALANCING EXTRACTION.**
- COMPENSATE UPPER ONLY (**IF UNOPPOSED FOR 1 YEAR**)

► MODERATE CROWDING:

1. CROWDING AT BUCCAL SEGMENT

- EXTRACT AT OPTIMAL TIME
- IF CROWDING **BILATERAL** (EXTRACT BALANCING)

2. CROWDING AT INCISOR SEGMENT

- **DELAY** EXTRACTION TILL SECOND MOLAR ERUPTION, THEN FIXED ORTHO APPLIANCE
- OR: EXTRACT AT OPTIMAL AND EXTRACT **PREMOLAR** IF 8 PRESENT !!



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CLASS II



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► MINIMUM CROWDING:

- EXTRACT AT THE OPTIMAL TIME.

1. DEFICANT MANDIBLE

- **NO COMPENSATING EXTRACTION**, JUST FUNCTIONAL APPLIANCE

2. CAMOUFLAGE

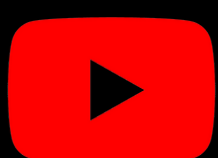
- **EXTRACT U6S IMMEDIATELY** (YOU AVOID 8 MAY BE IMPACTED) THEN YOU MAY NEED EXTRACT U4S LATER.

3. CLASS II 1/2 UNIT

- IF BAD PROGNOSIS, EXTRACT AT IDEAL TIME

► MODERATE CROWDING:

- EXTRACT L6S + U4S



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CLASS III



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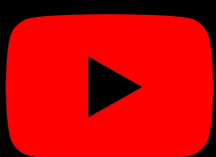
► CAMOUFLAGE

- DELAY EXTRACTION IN **LOWER.**

► SURGERY

- DELAY EXTRACTION IN **UPPER.**

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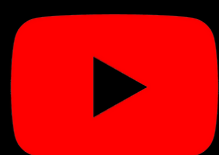
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Any questions?

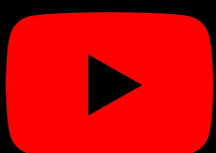
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